

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for measuring at least the pressure of a fluid present in a chamber ~~(16)~~, said device comprising a sensitive element ~~(36)~~ placed in a housing ~~(38)~~ ~~borne by~~ provided within a seal ~~(10)~~ interposed between two elements ~~(12, 14)~~ forming said chamber, characterized in that the housing (38) is open in the direction of the chamber (16) and surrounded by the seal in all other directions and the sensitive element (36) is coated with a material (67) filling said housing.

2. (Currently Amended) A measuring device as claimed in claim 1, characterized in that the seal (10) comprises a pile of two extreme sheets (32, 34) between which a multiplicity of intermediate sheets (42, 48, 50, 52, 54) is arranged and the housing (38) is delimited by said extreme sheets and at least one intermediate sheet.

3. (Currently Amended) A measuring device as claimed in claim 2, characterized in that at least one intermediate sheet comprises a cut ~~(40)~~ open in the direction of the chamber (16).

4. (Currently Amended) A measuring device as claimed in claim 2, characterized in that at least one intermediate sheet ~~(48, 54)~~ comprises electric

connection means ~~(58, 59, 60)~~ between the sensitive element ~~(36)~~ and a measuring means.

5. (Currently Amended) A measuring device as claimed in claim 4, characterized in that the electric connection means ~~(58, 59, 60)~~ are borne by an intermediate sheet in form of a film ~~(48, 54)~~ on which a printed circuit comprising at least one electric conductor ~~(60, 63)~~ between the sensitive element ~~(36)~~ and the measuring means is formed.

6. (Currently Amended) A measuring means as claimed in claim 2, characterized in that the sheets are electrically insulated from one another by at least one sheet in form of a plate, layer or insulating deposit ~~(50, 52)~~.

7. (Currently Amended) A measuring device as claimed in claim 4, characterized in that two of the opposite vertical faces of the sensitive element ~~(36)~~ are connected to the electric connection means.

8. (Currently Amended) A measuring device as claimed in claim 4, characterized in that two of the opposite horizontal faces of the sensitive element ~~(36)~~ are connected to the electric connection means.

9. (Currently Amended) A measuring device as claimed in claim 4, characterized in that the sensitive element ~~(36)~~ is connected to the electric connection means by a conducting glue ~~(64)~~.

10. (Currently Amended) A measuring device as claimed in claim 4, characterized in that the sensitive element ~~(36)~~ is connected to the electric connection means by at least one conducting element (66).

11. (Previously Presented) A measuring device as claimed in claim 2, characterized in that the sheets are joined together by glueing.

12. (Currently Amended) A measuring device as claimed in claim 11, characterized in that glueing is carried out by interposing a glue layer ~~(56)~~.

13. (Original) A measuring device as claimed in claim 2, characterized in that at least the extreme sheets ~~(32, 34)~~ are made of metal.

14. (Currently Amended) A measuring device as claimed in claim 2, characterized in that at least the central sheet ~~(42)~~ of the intermediate sheets is made of metal.

15. (Original) A measuring device as claimed in claim 1, characterized in that the material ~~(67)~~ filling the housing ~~(38)~~ is a resin withstanding high temperatures.

16. (Currently Amended) A measuring device as claimed in claim 1, characterized in that a face ~~(57)~~ of the housing in the direction of the chamber is covered with a protective element ~~(68)~~.

17. (Currently Amended) A measuring device as claimed in claim 16, characterized in that the protective element ~~(68)~~ comprises a wall covering face ~~(57)~~ and the ends of said wall are folded back over extreme sheets ~~(32, 34)~~ of the seal.

18. (Currently Amended) A measuring device as claimed in claim 1, characterized in that the sensitive element ~~(36)~~ is ~~of a~~ piezoelectric or piezoresistive type element.

19. (Currently Amended) A measuring device as claimed in claim 1, characterized in that the seal ~~(10)~~ is a cylinder head gasket arranged between the cylinder head ~~(12)~~ and the engine block ~~(14)~~ of an internal-combustion engine.

20. (Original) A measuring device as claimed in claim 1, characterized in that the seal comprises a temperature-sensitive element.

21. (Currently Amended) ~~Application of~~ A method, comprising using at least one measuring device as claimed in claim 1 ~~to for~~ engine knock measurement, detection and analysis in the combustion chamber of an internal-combustion engine.

22. (Currently Amended) ~~Application of~~ A method, comprising using at least one measuring device as claimed in claim 1 ~~to for~~ combustion characterization in at least one combustion chamber of an internal-combustion engine.

23. (Currently Amended) ~~Application of~~ A method, comprising using at least one measuring device as claimed in claim 1 to engine knock location in the combustion chamber of an internal-combustion engine.

24. (New) A measuring device as claimed in claim 1, characterized in that the sensitive element is coated at its end facing the chamber and at its end opposite the end facing the chamber with the material filling the housing.

25. (New) A measuring device as claimed in claim 1, characterized in that at least outer layers of said seal extend to the chamber.

26. (New) A measuring device as claimed in claim 2, characterized in that at least the extreme sheets extend to the chamber.

27. (New) A measuring device as claimed in claim 2, characterized in that at least the extreme sheets and outer ones of the intermediate sheets extend to the chamber.